District I 1625 N. French Dr., Hobbs, NM 88240 District II 1301 W. Grand Avenue, Artesia, NM 88210 District III 1000 Rio Brazos Road, Aztec, NM 87410 District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico **Energy Minerals and Natural Resources** Department Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

For temporary pits, closed-loop systems, and below-grade tanks, submit to the appropriate NMOCD District Office.

For permanent pits and exceptions submit to the Santa Fe Environmental Bureau office and provide a copy to the appropriate NMOCD District Office.

Pit, Closed-Loop System, Below-Grade Tank, or Proposed Alternative Method Permit or Closure Plan Application

Type of action: Permit of a pit, closed-loop system, below-grade tank, or proposed alternative method Closure of a pit, closed-loop system, below-grade tank, or proposed alternative method

Instructions: Please submit one application (Form C-144) per individual pit, closed-loop system, below-grade tank or alternative request Please be advised that approval of this request does not relieve theoperator of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's rules, regulations or ordinances. Operator: <u>Energen Resources Corporation</u> Address: 2010 Afton Place, Farmington, New Mexico 87401 RCVD JUL 2 '08 Facility or well name: Carracas 22 A #16 OIL CONS. DIV. API Number: 30-039-24405 OCD Permit Number: DIST. 3 U/L or Qtr/Qtr SESE Section 22 Township 32N Range 5W County: Rio Ariiba Center of Proposed Design: Latitude 30° 53' 39.079 N Longitude 111° 28' 36.030 W NAD: □1927 ☑ 1983 Surface Owner: Federal State Private Tribal Trust or Indian Allotment Pit: Subsection F or G of 19.15.17.11 NMAC Closed-loop System: Subsection H of 19.15.17.11 NMAC Temporary: Drilling Workover ☐ Drying Pad ☐ Tanks ☐ Haul-off Bins ☐ Other Permanent Emergency Cavitation ☐ Lined ☐ Unlined ☐ Lined ☐ Unlined Other ☐ String-Reinforced Seams: Welded Factory Other Volume: <u>265</u> bbl <u>165</u> yd³ Seams: Welded Factory Other Dimensions: Length 40 x Width 12 Volume: _____bbl Dimensions: L__x W___x D___ Below-grade tank: Subsection I of 19.15.17.11 NMAC Fencing: Subsection D of 19.15.17.11 NMAC Chain link, six feet in height, two strands of barbed wire at top Type of fluid: Four foot height, four strands of barbed wire evenly spaced between one and Tank Construction material: four feet Secondary containment with leak detection Netting: Subsection E of 19.15.17.11 NMAC ☐ Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off ☐ Screen ☐ Netting ☐ Other ☐ Visible sidewalls and liner Monthly inspections ☐ Visible sidewalls only Signs: Subsection C of 19.15.17.11 NMAC 12'x24', 2' lettering, providing Operator's name, site location, and Other Liner type: Thickness _____ mil HDPE PVC emergency telephone numbers Other ⊠ Signed in compliance with 19.15.3.103 NMAC Alternative Method: Administrative Approvals and Exceptions: Submittal of an exception request is required. Exceptions must be Justifications and/or demonstrations of equivalency are required. Please refer to submitted to the Santa Fe Environmental Bureau office for consideration 19.15.17 NMAC for guidance. of approval. Please check a box if one or more of the following is requested, if not leave blank: Administrative approval(s): Requests must be submitted to the appropriate division district or the Santa Fe Environmental Bureau office for consideration of approval.

Exception(s): Requests must be submitted to the Santa Fe

Environmental Bureau office for consideration of approval.

☐ Yes ☐ No
☐ Yes ☐ No
☐ Yes ☐ No ☐ NA
Yes No
Yes No
Yes No
☐ Yes ☐ No
Yes No
☐ Yes ☐ No
Yes No

Temporary Pits, Emergency Pits, and Below-grade Tanks Permit Application Attachment Checklist: Sul Instructions: Each of the following items must be attached to the application. Please indicate, by a check ma	osection B of 19.15.17.9 NMAC wrk in the box, that the documents are					
attached.						
Hydrogeologic Report (Below-grade Tanks) - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC						
Hydrogeologic Data (Temporary and Emergency Pits) - based upon the requirements of Paragraph (2) of S						
Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NM						
	AC					
Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC						
Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC						
Closure Plan - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.1	17.13 NMAC					
Previously Approved Design (attach copy of design) API Number: or Perm	it Number:					
Closed-loop Systems Permit Application Attachment Checklist: Subsection B of 19.15.17.9 NMAC						
Instructions: Each of the following items must be attached to the application. Please indicate, by a check ma	rk in the box, that the documents are					
attached.	1 (0) 00 1 D 010 16 18 0					
Geologic and Hydrogeologic Data (required for on-site closure) - based upon the requirements of Paragraphic Control of the control of Paragraphic Control of the control of Paragraphic Control of the co						
Siting Criteria Compliance Demonstrations (required for on-site closure) - based upon the appropriate req	uirements of 19.15.17.10 NMAC					
Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC						
Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC						
Closure Plan - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.	17.13 NMAC					
NMAC						
Description Ann. 1D 1 (w. 1 C. 1) ADVAL						
Previously Approved Design (attach copy of design) . API Number:						
Permanent Pits Permit Application Checklist: Subsection B of 19.15.17.9 NMAC						
Instructions: Each of the following items must be attached to the application. Please indicate, by a check ma	rk in the box, that the documents are					
attached.						
☐ Hydrogeologic Report - based upon the requirements of Paragraph (1) of Subsection-B of 19.15.17.9 NM	AC····					
☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NM	AC					
Climatological Factors Assessment						
☐ Certified Engineering Design Plans - based upon the appropriate requirements of 19.15.17.11 NMAC						
☐ Dike Protection and Structural Integrity Design - based upon the appropriate requirements of 19.15.17.11	NMAC					
☐ Leak Detection Design - based upon the appropriate requirements of 19.15.17.11 NMAC						
Liner Specifications and Compatibility Assessment - based upon the appropriate requirements of 19.15.17	.11 NMAC					
☐ Quality Control/Quality Assurance Construction and Installation Plan						
Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC						
Freeboard and Overtopping Prevention Plan - based upon the appropriate requirements of 19.15.17.11 NM	1AC					
Nuisance or Hazardous Odors, including H ₂ S, Prevention Plan						
Emergency Response Plan						
Oil Field Waste Stream Characterization						
☐ Monitoring and Inspection Plan						
Erosion Control Plan						
Closure Plan - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.	17.13 NMAC					
Proposed Closure: 19.15.17.13 NMAC						
rroposed Closure: 19.13.17.13 NMAC						
Type: Drilling Workover Emergency Cavitation Permanent Pit Below-grade Tank	Closed-loop System Alternative					
Proposed Closure Method: Waste Excavation and Removal						
On-site Closure Method (only for temporary pits and closed-loop systems)						
☐ In-place Burial ☐ On-site Trench Burial						
Alternative Closure Method (Exceptions must be submitted to the Santa Fe Envi	ronmental Bureau for consideration)					

Siting Criteria (regarding on-site closure methods only): 19.15.17.10 NMAC					
Instructions: Each siting criteria requires a demonstration of compliance in the closure plan. Recommendations of acceptable source material are provided below. Requests regarding changes to certain siting criteria may require administrative approval from the appropriate district office or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of approval. Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17.10					
NMAC for guidance.					
Ground water is less than 50 feet below the bottom of the buried waste. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells					
Ground water is between 50 and 100 feet below the bottom of the buried waste - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells					
Ground water is more than 100 feet below the bottom of the buried waste. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells					
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other watercourse, lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No				
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☐ No				
Within 500 horizontal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock watering purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence at the time of initial application. - NM Office of the State Engineer - iWATERS database; Visual inspection (certification) of the proposed site	Yes No				
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended.					
- Written confirmation or verification from the municipality; Written approval obtained from the municipality Within 500 feet of a wetland.	☐ Yes ☐ No				
- US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site Within the area overlying a subsurface mine.					
- Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division					
 Within an unstable area. Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map 	☐ Yes ☐ No				
Within a 100-year floodplain FEMA map	☐ Yes ☐ No				
Waste Excavation and Removal Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the following items must be attached to the closure plan. Please indicate, by a check mark in the box, that the documents are attached. ☐ Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC ☐ Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC ☐ Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings) ☐ Soil Backfill and Cover Design Specifications - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC ☐ Re-vegetation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC					
Waste Removal Closure For Closed-loop Systems That Utilize Haul-off Bins Only: (19.15.17.13.D NMAC) Instructions: Please indentify the facility or facilities for the disposal of liquids, drilling fluids and drill cuttings.					
Disposal Facility Name: Envirotech, Agua Moss (Pretty Lady #1) Disposal Facility Permit Number: NM-01-0011, API # 30-048-30922					
On-Site Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the following items must be attached to the closure plan. Please indicate, by a check mark in the box, that the documents are attached. Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC Proof of Surface Owner Notice - based upon the appropriate requirements of 19.15.17.13 NMAC Construction and Design of Burial Trench (if applicable) based upon the appropriate requirements of 19.15.17.11 NMAC Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC Waste Material Sampling Plan - based upon the appropriate requirements of Subsection F or 19.15.17.13 NMAC Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings or in case on site closure standards cannot be achieved)					
Soil Cover Design - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC					

Operator Application Certification:						
I hereby certify that the information submitted with this application is true, accurate an	d complete to t	he best of my knowledge and belief.				
Name (Print): Nathan Smith	Title:	Drilling Engineer				
Signature: WylneSall	Date:	7/2/08				
e-mail address: nsmityh@energen.com	Telephone: _	505-324-4151				
OCD Approval: Permit Application (including closure plan) Closure Plan (or	nly)					
OCD Representative Signature: Brandon Sell		Approval Date: 7/3/08				
Title: Enviro/Spec OC	D Permit Num	ber:				
Closure Report (required within 60 days of closure completion): Subsection K of 19.15.17.13 NMAC Closure Completion Date:						
Closure Method: Waste Excavation and Removal On-Site Closure Method Alternative Closure Method If different from approved plan, please explain.						
Closure Report Attachment Checklist: Instructions: Each of the following items m	ust be attached	d to the closure report. Please indicate, by a check				
mark in the box, that the documents are attached.		•				
Proof of Closure Notice						
☐ Proof of Deed Notice (if applicable) ☐ Plot Plan						
Confirmation Sampling Analytical Results	•					
Waste Material Sampling Analytical Results						
Disposal Facility Name and Permit Number						
Soil Backfilling and Cover Installation						
☐ Re-vegetation Application Rates and Seeding Technique	•	•				
☐ Site Reclamation (Photo Documentation)		F*************************************				
On-site Closure Location: LatitudeLongitude		NAD: □1927 □ 1983				
Operator Closure Certification:						
I hereby certify that the information and attachments submitted with this closure report	is true, accurate	e and complete to the best of my knowledge and				
belief. I also certify that the closure complies with all applicable closure requirements and conditions specified in the approved closure plan.						
Name (Print):	Title:					
Signature:	_ Date:					
e-mail address:	Telephone:					

Closed-loop Design Plan:

Our closed loop system will not entail a drying pad, temporary pit, below grade tank or sump. It will entail an above ground tank suitable for holding the cuttings and fluids for rig operations. The tank will be of sufficient volume to maintain a safe free board between disposal of the liquids and solids from rig operations.

- 1) Fencing is not required for an above ground closed-loop system.
- 2) It will be signed in compliance with 19.15.3.103 NMAC.
- 3) A frac tank will be on location to store fresh water.

Closed-loop Operating and Maintenance Plan:

The closed-loop tank will be operated and maintained; to contain liquids and solids, to aid in the prevention of contamination of fresh water sources, in order to protect public health and the environment. To attain this goal the following steps will be followed:

- 1) The liquids will be vaccumed out and disposed of at the Agua Moss Pretty Lady #1 facility (Disposal API Number 30-048-30922). Solids in the closed-loop tank will be vacuumed out and disposed of at Envirotech (Permit Number NM-01-0011) on a periodic basis to prevent over topping.
- 2) No hazardous waste, miscellaneous solid waste or debris will be discharged into or stored in the tank. Only fluids or cuttings used or generated by rig operations will be placed or stored in the tank.
- 3) The division district office will be notified within 48 hours of the discovery of compromised integrity of the closed-loop tank. Upon the discovery of the compromised tank, repairs will be enacted immediately.
- 4) All of the above operations will be inspected and a log will be signed and dated. During rig operations the inspection will be daily.

Closed-loop Closure Plan:

The closed loop tank will be closed in accordance with 19.15.17.13. This will be done by transporting cuttings and all remaining sludges to Envirotech (Permit Number NM-01-0011) immediately following rig operations. All remaining liquids will be transported and disposed of in the Agua Moss Pretty Lady #1 facility (Disposal API number 30-048-30922). The tanks will be removed from the location as part of the rig move. At time of well abandonment, the site will be reclaimed and re-vegetated to pre-existing conditions when possible.

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410

1220 S. St. Francis Dr., Santa Fe, NM 87505

District IV

State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION 1220 South St. Francis Dr. Santa Fe, NM 87505

Form C-102 Revised October 12, 2005 Submit to Appropriate District Office State Lease - 4 Copies Fee Lease - 3 Copies

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number		r		² Pool Code ³ Pool Name						
30-039-24405			71629			Basin Fruitland Coal				
⁴ Property Code				⁵ Property Name				6 7	⁶ Well Number	
		Carracas 22A							#16	
OGRID No.		⁸ Operator Name						⁹ Elevation		
162928	1	Energen Resources Corporation						7065' GL		
¹⁰ Surface Location										
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County	
. P	22	32N	5W		790	South	790	East	Rio Arriba	
11 Bottom Hole Location If Different From Surface										
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County	
<u>.</u>	22	32N	5W		2530	South	760	East	Rio Arriba	
¹² Dedicated Acres 13 Joint or Infill 14 Consolidation Code 15 Order No.										
				İ						

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

16			¹⁷ OPERATOR CERTIFICATION
			I hereby certify that the information contained herein is true and complete
			to the best of my knowledge and belief, and that this organization either
			owns a working interest or unleased mineral interest in the land including
			the proposed bottom hole location or has a right to drill this well at this
			location pursuant to a contract with an owner of such a mineral or working
			interest, or to a voluntary pooling agreement or a compulsory pooling
			order heretofore entgred by the division.
			Signature Date
			Signature Date Nathan Smith Printed Name
	27		
		BHL •	18SURVEYOR CERTIFICATION
	į	760'	I hereby certify that the well location shown on this
		-	plat was plotted from field notes of actual surveys
			
			made by me or under my supervision, and that the
)	ļ	2530'	same is true and correct to the best of my belief.
			June 6, 1988
		 	Date of Survey
			Signature and Seal of Professional Surveyor:
	ļ		Original Survey Conducted and Recorded By: Neale C. Edwards
	į		
		SHL 790'	
			6857
	ŀ	790'	Certificate Number
			Common Tunion